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Recommendation of the Secretary of Agriculture for the appointment of a Director-in-Chief of Scientific Work.

U. S. DEPARTMENT OF AGRICULTURE, OFFICE OF THE SECRETARY, Washington, D. C., February 15, 1896.

To the Committee on Agriculture of the United States Senate and House of Representatives.

Gentlemen: After mature deliberation and conference with gentlemen who have made the scientific work of this Department a special study, I am convinced that it is my duty to ask Congress to provide in the pending appropriation bill for a Director-in-Chief of Scientific Divisions, who shall be charged with the supervision of the very important, comprehensive, and constantly growing scientific work done in the Depart-

ment of Agriculture.

The Department of Agriculture has for its object the discovery, exploration, development, conservation, and proper utilization of the agricultural resources of our country. This is accomplished through various agencies, which are classified as either purely scientific, technical, or simply business, administrative, or educational agencies. These agencies are organized in the Department under two large bureaus and a number of divisions and offices. The Weather Bureau includes 3 executive or business offices, 6 technical divisions, and 5 scientific experts engaged in research, besides 154 technical observing stations and 52 signal stations along the coast and on the Great Lakes. The Bureau of Animal Industry includes 2 administrative offices, 152 technical stations or agencies engaged in meat inspection, quarantine work, etc., and 3 laboratories for scientific investigations. Of the remaining divisions in the Department, 7 are engaged in administrative business, publishing and distributing information, 8 are classed as technical, and 7 are chiefly engaged in scientific investigations or surveys of the country's resources.

An analysis of the last act shows that of the \$2,400,000 appropriated for the Department of Agriculture, over \$1,700,000, or over 70 per cent, was given for this scientific and technical work, as distinguished from

the administrative or general work.

A canvass of the rolls of the Department shows that 993 out of a total of 2,019 employees are engaged chiefly upon this scientific and technical work.

It would seem a simple business proposition, needing no argument to support it, that this vastly important and comprehensive work, promoting, as it does, the development of almost every resource of our land and every industry of our people, our production at home and our markets abroad, and concerning even the food and health of a large part of our population, for which \$1,700,000 are annually expended, and in which nearly a thousand scientific and technical experts are engaged, should have a permanent, broadly educated, and experienced scientific superintendent.

No permanent and adequate direction and supervision is provided in the present organization of the Department. It is not to be supposed that the Secretary of Agriculture, a member of the President's Cabinet, even if a farmer and an experienced executive, will always be a technically trained scientific man. Even if he should be, he occupies the position only four years, and thus scarcely becomes familiar with the difficult and complex work of the Department before he leaves it. The Assistant Secretary of Agriculture is subject to the same conditions. Because he must represent the Secretary in the administration, he must go with the administration. These conditions, which are necessary and inherent in our system of government, it is not proposed to change. A Secretary and Assistant Secretary are both needed. But another permanent officer is needed to direct the work of the various scientific bureaus of the Department, under the general authority of the Secretary.

In order to accomplish the best and most permanent results, this Department must have a permanent policy with regard to all its scientific work. This Department has less relation to the general executive business of the Government, and less connection with what is usually called politics, than any other Department of the Government. In fact, the scientific work of the great bureaus, divisions, and surveys, above referred to, should be kept free from politics to be efficient and impartial to the interests of all. The numerous bureaus and divisions do not have under the present organization, in fact can not have, the attention and direction which the interests involved demand. After a change of administration the Department is practically headless, and to a great extent, helpless, until the new Secretaries have had time to master the details of the technical work. Such a director of scientific divisions is needed, therefore, if for nothing else, to carry on the scientific work of the Department from one administration to the next. it conceivable that any great manufacturing, railroad, or mining company, undertaking such difficult scientific work, and using so much money and so many men, would provide for it no permanent scientific direction or supervision whatever, and then change all the heads every four years, leaving the work practically at a standstill, or which is worse, entirely without direction or supervision for six months to a year? The change of administration affects the work of this Department even more than it does that of others, because its work is less of a routine character, is more progressive, changes more frequently, and thus requires constant direction to keep it usefully going. The bureaus and divisions of this Department can not do practically the same thing year after year, as they do in the great business departments of the Government, but must, if they serve the people properly, do a new and different thing almost every month in the year. They, therefore, need constant assistance and supervision much more than do the divisions of other Departments.

Aside from these special considerations with regard to the scientific work, the Department of Agriculture greatly needs another general executive officer. It has only two Secretaries authorized to take official action. There is no provision in the laws for any officer of the Department to act in case of the absence of the two Secretaries, as there is in some of the other Departments. Either the Secretary or the Assistant Secretary has to be present in the Department every day and every

official hour during the year.

The bureaus and divisions in Washington are, contrary to the popular idea, much the smaller part of the Department of Agriculture. Outside of Washington there are 154 observing stations, 52 signal stations of the Weather Bureau. There are 100 meat inspection stations in 40 different cities and towns in the country; 21 different quarantine stations for import cattle at points on the coast, the Canadian and Mexican boundary; 9 different stations for inspecting export stock; and 19 for inspecting stock for Texas fever, making a total of about 150 stations in the Bureau of Animal Industry, which should have inspection and. supervision occasionally by the highest authority of the Department. The agricultural experiment stations, located in different States and Territories, and several experiment stations of the Department of Agriculture must be inspected by this Department. In addition to these, the Department has many other agencies for studying soils, foods, and food dietaries, testing timbers, and collecting material illustrating our natural resources scattered all over the country. The Secretaries or director should be in position to visit and examine the work of the various agencies for the purpose of informing themselves as to their uses and needs. In view of the great amount of business done, and of the large number of branches of the Department scattered all over the country, another executive officer is greatly needed in order to permit a better distribution of work, and a more regular and thorough supervision of the outlying branches of the Department. The new officer here asked for should therefore be authorized to act, when called upon by the Secretary, as a Second Assistant Secretary.

The salary attached to the position should be sufficient to secure the services of a broadly educated scientific man, who has had the necessary experience in the administration of affairs and the direction of scientific work, and should be equal to that paid for similar services in

other branches of the Government.

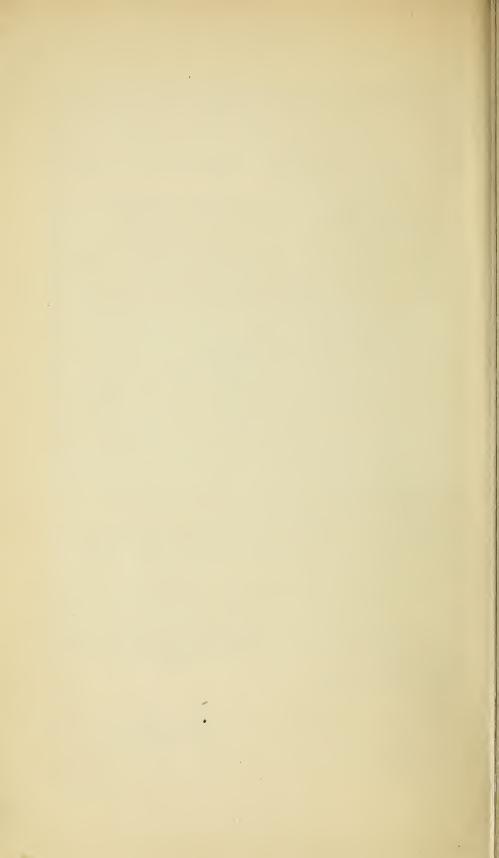
I therefore respectfully recommend that you insert after line 11, page 1, of the bill making appropriation for the Department of Agriculture for the fiscal year ending June 30, 1897, H. R. 5161, the words:

"Director-in-Chief of Scientific Bureaus and Investigations, to serve during good behavior, to have the authority to act as Assistant Secretary, and to perform such other duties as the Secretary may direct, six thousand dollars."

Respectfully submitted.

Marin Mortin

Secretary.





Opinions of scientific men and others with regard to the proposition for a Director-in-Chief of Scientific Bureaus in the Department of Agriculture.

[From members of the faculty of the Johns Hopkins University.]

The undersigned, having been informed that it is proposed to create in the Department of Agriculture the office of Director of Scientific Work, hereby express their conviction that the measure proposed is wise and timely. It has been demonstrated beyond question, during the present generation, that the applications of science to agriculture are innumerable and important. The work of the Department has met with the approval of highly qualified judges throughout this country and in other lands. In our opinion the time has come to give unity and permanence to this work by establishing an office to be held by a person of high qualifications, who shall not be liable to removal because of a change in the general administration of the Government.

(Signed)

Daniel C. Gilman, President.

Ira Remsen, Professor of Chemistry.

Wm. B. Clark, Professor of Organic Geology.

Henry N. Rowland, Professor of Physics.

Wm. H. Howell, Professor of Physiology.

Jas E. Humphrey, Lecturer on Botany.

Edward H. Griffin, Dean of the College Faculty.

Edward Renouf, Collegiate Professor of Chemistry.

H. N. Morse, Professor of Analytical Chemistry.

February 18, 1896.

### HARVARD UNIVERSITY,

Lawrence Scientific School, Cambridge, Mass., February 18, 1896.

My Dear Sir: I beg leave to enter with you my petition that the proposed amendment to the Agricultural Appropriation Bill, providing for the appointment of a director-in-chief of scientific bureaus and investigations may find favor with your committee.

investigations may find favor with your committee.

The change which will be made by the adoption of the measure will secure unity in the varied work of the Department and will increase the effectiveness of the excellent service which the Department is ren-

dering to the economic and scientific interests of this country.

Yours very truly,

(Signed)

N. S. SHALER.

Senator Redfield Proctor,

Chairman Committee on Agriculture.

COLUMBIA COLLEGE, New York, February 13, 1896.

My Dear Sir: I have just learned that the Secretary of the Department of Agriculture has asked for the insertion, in the appropriation bill for the Department, of the following words: "Director-in-Chief of Scientific Bureaus and Investigations, to serve during good behavior, to have authority to act as Assistant Secretary, and to perform such other duties as the Secretary may direct—\$6,000."

It gives me pleasure to say that I look upon this suggestion as opening the way for a most important reform in relation to the scientific work of the Department, and, incidentally, of the scientific work of the Government as a whole. From the nature of the case, scientific work is as far as possible removed from the sphere of politics. Permanency in the direction of it is essential to the accomplishment of the best results-

(1) Because only by permanency can the oversight and direction of

a man of the highest standing be secured; and,

(2) Because very many scientific investigations have to be maintained

for a series of years before they yield trustworthy results.

Speaking as an administrator, I should take it for granted that such an officer appointed on a permanent tenure during good behavior, would save to the Government many times his salary every year in administrative expenses, while he would multiply very greatly the efficiency of all Bureaus placed under his care. I think it quite probable that the Government would be asked to appropriate as much money after such an appointment as now, but I am confident the money would go a great deal further and produce much more valuable results. Under these circumstances, I venture to hope that your committee and the House will adopt the suggestion of the Secretary in regard to this very important matter. I do not think it easy to overestimate the effect it would have upon the scientific standing of the Government work in all its relations both at home and abroad.

Respectfully,

SETH LOW.

Hon. James W. Wadsworth,

Chairman of the Committee on Agriculture, House of Representatives, Washington, D. C.

> NEW YORK CITY, February 13, 1896.

My Dear Senator Proctor: I am very anxious to do anything I can to help the passage of that amendment to the bill making appropriation for the Department of Agriculture, proposed by the Secretary of Agriculture, which provides for a director-in-chief of the scientific

bureaus to serve during good behavior.

I have long been much interested in the scientific work of our Government. It has been done in a manner that reflects credit upon the whole nation; but it should be given more continuity than it has had in the past, and it should be taken absolutely out of the domain of pol-In those scientific bureaus politics should not enter. It would be an excellent thing for the Government if in these scientific bureaus we could have continuity of work from administration to administration; and it seems to me that it could be given by the appointment of a scientific under-secretary. The value of the work would be very greatly enhanced and we would gradually develop at Washington a corps of scientists whose equal would be found in no capital of the civilized world. We could not get a first-class scientific man to take the place if he thought it would be changed with each administration.

I earnestly hope you may see your way clear to support the measure, as it is one in which a large number of scientific men, and of educated men interested in scientific matters, all over the country, take a great

interest. It seems to me a matter of prime importance.

Sincerely yours,

THEODORE ROOSEVELT.

Hon. Redfield Proctor, Senate Chamber, Washington, D. C.

UNIVERSITY OF WISCONSIN,
AGRICULTURAL EXPERIMENT STATION,
Madison, Wis, February 18, 1896.

DEAR SIR: I have just learned that Secretary Morton has sent a communication to the Agricultural Committee recommending the creation of the office of "Director-in-Chief of Scientific Bureaus and Investiga-

tions" in the Department of Agriculture.

I take this early opportunity of writing you that I believe this a most important and timely recommendation, and one which will meet with your entire approbation when you have studied the matter carefully. The Secretary of Agriculture and the Assistant Secretary can not, from the very nature of their offices, give that close attention and continued effort in keeping the scientific bureaus up to their highest efficiency and securing from them the greatest amount of good work possible for the money expended. With an outlay of something like \$1,700,000 for scientific work and investigation, Secretary Morton's recommendation for a head supervisor and director for this vast expenditure seems in line with what any good business man would do under the same circumstances.

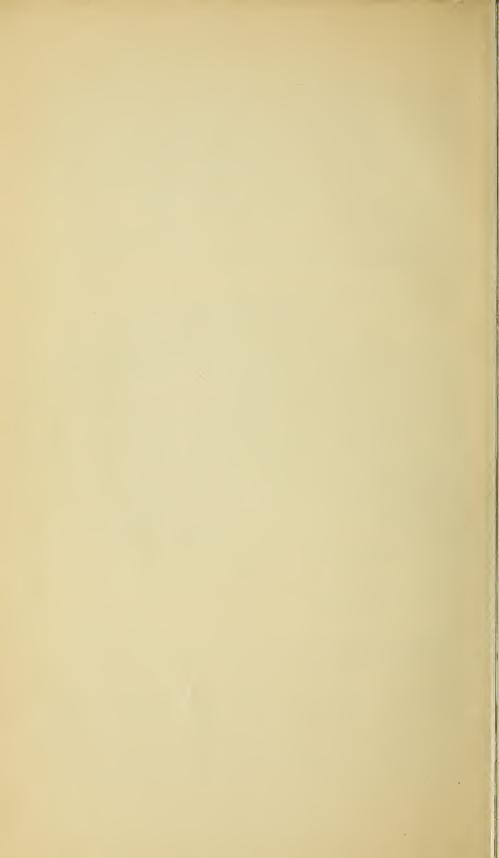
Trusting and believing that this matter will receive thoughtful attention at your hands, I am,

Very respectfully, (Signed)

W. A. Henry, Director.

Hon. WM. F. VILAS, U. S. Senate, Washington, D. C.

[The above, which are only specimen letters, are being added to by every mail.]



# Opinions of scientific men with regard to the proposition for a Director-in-Chief of Scientific Bureaus in the Department of Agriculture.

[From Science, Vol. III, No. 60, February 21, 1896, pp. 278-279.]

An amendment to the Agricultural appropriation bill has just been sent to Congress providing for a "Director-in-Chief of Scientific Bureaus and Investigations, to serve during good behavior, to have authority to act as Assistant Secretary, and to perform such other duties as the

Secretary may direct."

This amendment, which has received the indorsement of the Secretary and Assistant Secretary of Agriculture, is the outgrowth of an effort to secure a permanent nonpolitical organization and administration of the various bureaus and divisions engaged in the scientific work of the Government, and at the same time bring about a more intelligent and more effective cooperation than has been heretofore possible.

The chief promoters of this movement are well-known public-spirited educators and men of science entirely outside of the Government service.

The Department of Agriculture as at present organized comprises a large number of scientific and administrative divisions having for their object the discovery, exploration, and development of the agricultural and other natural resources of the country. The scientific divisions are engaged in researches requiring the highest technical skill, and some of them in the solutions of problems requiring long years of preparation

and scientific training.

Excluding the Weather Bureau, no less than eight divisions are doing work which in the main is purely scientific, and each of these has its independent laboratory or laboratories. Including the Weather Bureau and the meat inspection service of the Bureau of Animal Industry, 993 of a total of 2,019 employees are engaged chiefly upon scientific and technical subjects, and \$1,700,000 of the \$2,400,000 appropriated for the Department of Agriculture is expended upon this work. But the greater part of the work of the Weather Bureau and Bureau of Animal Industry, while fundamentally scientific in method and character, is not in the line of original investigation, and therefore may be omitted in the present statement. Still, each of these bureaus conducts at Washington certain investigations in pure science, the cost of which, added to that of the eight scientific divisions already mentioned, amounts annually to nearly half a million dollars. Nevertheless no cooperative organization or classification of these scientific divisions, except those of the Weather Bureau, has been as yet undertaken.

It would seem a simple business proposition, needing no argument, that this comprehensive and vastly important work, promoting, as it does, the development of almost every resource of our land and every industry of our people, and concerning the food and health of a large part of our population, should have a permanent, broadly educated and experienced scientific head, free from the disquieting influence of

politics.

The first, and in some respects the most difficult, step toward the accomplishment of this end was taken when Secretary Morton secured for the Department of Agriculture the protection of the civil service, thus putting an end to the terrors of political pressure in filling vacancies in the scientific divisions.

Should the amendment now before Congress become a law—and it is believed the friends of science and education throughout the land will give it their unqualified support—it is by no means improbable that other scientific bureaus of the Government will seek the protection and support provided thereby, and that in the near future we may boast a National Department of Agriculture and Science.

#### Washington, D. C., March 3, 1896.

DEAR SIR: I note by the papers that you have recommended to Congress the appointment of a Director-in-Chief of Scientific Bureaus and Investigations in your Department, to be appointed by the President, by and with the consent of Congress, and to perform the duties of Assistant Secretary when so designated by the Secretary.

I write to say that I am in hearty accord with the recommendation indicated. While I was Assistant Secretary I made to Secretary Rusk a similar recommendation. Under the existing law, I was put especially in charge, by the Secretary, of the scientific work of the Department. I had been in charge but a short time when I felt that the duties for that alone were sufficient for all the energies and executive ability of one man, and that, coupling it with the general duties as Assistant Secretary, made more than any one man could do well in either branch. The regular Assistant Secretary is charged with many executive and semiexecutive matters foreign to the scientific work. His correspondence is overwhelming, and it is impossible to give the work of the scientific bureaus of investigation that continuous thought and consideration which its economical and highest results demand. An official charged with the whole work, thoroughly understood and regulated by him, would eliminate all duplication and unify the work to such an extent as to save the amount of his salary annually many times over. He should be a continuous official, not changed except for cause, so that he can formulate plans which would be consistent, harmonious, and continuous. The longer I remained in the Department the more the necessity for such an official became apparent, especially after I was made chairman of the Board of Government Exhibits at the Chicago Exposition. Naturally, these extra duties are imposed upon the Assistant Secretary, and I was burdened with these extra duties to the extent of almost depriving me of any consideration of what is really the highest work in the Department, to wit, its scientific work. It is a full field for a full man with the highest executive ability, and I sincerely hope that your recommendation may be adopted by Congress. I have no doubt of its practical value.

> Yours truly, (Signed)

EDWIN WILLITS.

Hon. J. STERLING MORTON, Secretary of Agriculture. [From the Joint Commission of the Scientific Societies of Washington, D. C.]

Whereas, The work of the Department of Agriculture in the discovery, exploration, development, conservation, and proper utilization of the resources of our country is of the utmost importance; and whereas the Department's capacity for originating, procuring, and disseminating knowledge of vital importance to farming and other interests, though already large, is capable of much extension in the future; and whereas the results accomplished through the system now in existence have been exceedingly great, and the one thing above all others necessary to increase the efficiency of this organization is a permanent policy with regard to its work and personnel:

Resolved, That the Joint Commission of the Scientific Societies of Washington, composed of the officers of the several scientific societies of the city, comprising in all a membership of nearly 2,000, heartly approves the proposition to create the office of "Director-in-Chief of Scientific Divisions in the Department of Agriculture," to be filled by a broadly educated and experienced scientific administrative officer,

holding office during good behavior.

Resolved, That the plan of having a permanent officer in charge of the scientific and technical work under the executive head of a Department represe ts a distinct advance in good government, and is therefore not only of national importance, but if carried out certain to have a beneficial effect upon the scientific standing of Government work in all its relations.

[From members of the faculty of the Johns Hopkins University.]

The undersigned, having been informed that it is proposed to create in the Department of Agriculture the office of Director of Scientific Work, hereby express their conviction that the measure proposed is wise and timely. It has been demonstrated beyond question, during the present generation, that the applications of science to agriculture are innumerable and important. The work of the Department has met with the approval of highly qualified judges throughout this country and in other lands. In our opinion the time has come to give unity and permanence to this work by establishing an office to be held by a person of high qualifications, who shall not be liable to removal because of a change in the general administration of the Government.

(Signed)

Daniel C. Gilman, President.

Ira Remsen, Professor of Chemistry.

Wm. B. Clark, Professor of Organic Geology.

Hen y N. Rowland, Professor of Physics.

Wm. H. Howell, Professor of Physiology.

Jas E. Humphrey, Lecturer on Botany.

Edward H. Griffin, Dean of the College Faculty.

Edward Renouf, Collegiate Professor of Chemistry.

H. N. Morse, Professor of Analytical Chemistry.

Baltimore, Md., February 18, 1896.

[From the faculty of Yale University.]

NEW HAVEN, CONN., February 25, 1896.

We, the undersigned, officers in Yale University, having been informed that the Honorable Secretary of Agriculture wishes to create

in his Department a Director of Scientific Work, to hold the office during good behavior, wish to express our belief that the measure is a wise

The practical applications of science in the prosecution of our industries are too numerous and are on too vast a scale in our country to need any argument regarding their importance. The work of the Department of Agriculture in this direction has met with the approval of those best qualified to judge, both as to its scientific value and its practical use.

In our opinion, efficiency in the work and economy in expenditures will be increased by placing the scientific work under the supervision of a person of high qualifications, whose tenure of office shall be as permanent as that of professors in universities, or experts in industrial establishments.

We believe that this is a fit time and the Department a practical place for the establishment of such an office, and earnestly and respectfully petition that the measure will be carried out.

TIMOTHY DWIGHT.

President.

WM. H. BREWER,

Professor of Agriculture.

A. J. Dubois,

Professor of Civil Engineering.

SIDNEY I. SMITH.

Professor of Comparative Anatomy.

R. H. CHITTENDEN,

Professor of Physiological Chemistry. JOHN E. CLARK,

Professor of Mathematics.

CHARLES S. HASTINGS,

WM. G. MIXTER,

Professor of Chemistry.

L. L. Penfield,

Professor of Mineralogy.

A. E. VERRILL,

Professor of Zoology.

HENRY W. FARNUM,

Professor of Political Economy.

S. W. Johnson,

Professor of Physics.

Professor of Agricultural Chemistry. HORACE L. WELLS,

Professor of Chemistry.

SHEFFIELD SCIENTIFIC SCHOOL OF YALE UNIVERSITY, New Haven, Conn., February 20, 1896.

DEAR SIR: I learn that the Secretary of Agriculture has asked for an appropriation of \$6,000 for the salary of a "Director-in-Chief of Scientific Bureaus and Investigations," who is to serve during good behavior and to have authority to act as Assistant Secretary.

I earnestly hope that the appropriation may be made. I consider the suggestion one of extreme importance, and if the matter can be brought about it will be more far-reaching in its results than its mere use in the Agricultural Department. I have long been reasonably familiar with the operations of the scientific bureaus in the several Departments at Washington, and have had exceptional opportunities to know the opinions held by prominent scientific men of the country regarding the conditions necessary or desirable for the most efficient scientific work done in these bureaus.

Some years ago, as a member of the Committee of the National Academy of Sciences, asked to consider plans looking to the better correlation of the work of the scientific bureaus of the several Departments of Government, I studied the general subject at length. Since then I have been familiar with the work of the Department of Agriculture and of the important effect it is having on the industries of the country.

I feel that the present movement is entirely in the right direction. Much more than that, it seems to me to be more practical than any of

the plans that have heretofore been suggested.

It requires no argument that, for the good of the work to be accomplished, there should be permanency in the office of the one who supervises the work, and only by a permanence similar to that existing in the office of scientific men in universities, or even great technical establishments, can a man of the highest standing be available. I am confident that only by some such permanence of office can the efficiency and character of the work of the Department be depended upon from administration to administration.

That this is in the direction of good government needs no argument;

nor that it would be more economical in the end.

Moreover, there is no question in my mind but that such a movement would exert a most excellent influence on the other Departments, and enhance the scientific value of the Government work in the estimation of both scientific men and of the citizens who practically apply the results in their vocations.

Yours respectfully,

WM. H. BREWER,

Professor of Agriculture in Yale University.

Hon. Redfield Proctor,

Chairman of the Committee on Agriculture.

#### HARVARD UNIVERSITY,

Lawrence Scientific School, Cambridge, Mass., February 18, 1896.

My Dear Sir: I beg leave to enter with you my petition that the proposed amendment to the Agricultural Appropriation Bill, providing for the appointment of a Director-in-Chief of Scientific Bureaus and Investigations may find favor with your committee.

The change which will be made by the adoption of the measure will secure unity in the varied work of the Department and will increase the effectiveness of the excellent service which the Department is ren-

dering to the economic and scientific interests of this country.

Yours very truly, (Signed)

N. S. SHALER.

Senator Redfield Proctor,

Chairman Committee on Agriculture.

Columbia College, New York, February 13, 1896.

MY DEAR SIR: I have just learned that the Secretary of the Department of Agriculture has asked for the insertion, in the appropriation bill for the Department, of the following words: "Director-in-Chief of Scientific Bureaus and Investigations, to serve during good behavior, to have authority to act as Assistant Secretary, and to perform such other duties as the Secretary may direct—\$6,000."

It gives me pleasure to say that I look upon this suggestion as opening the way for a most important reform in relation to the scientific work of the Department, and, incidentally, of the scientific work of the Government as a whole. From the nature of the case, scientific work is as far as possible removed from the sphere of politics. Permanency in the direction of it is essential to the accomplishment of the best results—

(1) Because only by permanency can the oversight and direction of

a man of the highest standing be secured; and,

(2) Because very many scientific investigations have to be maintained

for a series of years before they yield trustworthy results

Speaking as an administrator, I should take it for granted that such an officer appointed on a permanent tenure during good behavior, would save to the Government many times his salary every year in administrative expenses, while he would multiply very greatly the efficiency of all bureaus placed under his care. I think it quite probable that the Government would be asked to appropriate as much money after such an appointment as now, but I am confident the money would go a great deal further and produce much more valuable results. Under these circumstances, I venture to hope that your committee and the House will adopt the suggestion of the Secretary in regard to this very important matter. I do not think it easy to overestimate the effect it would have upon the scientific standing of the Government work in all its relations both at home and abroad.

Respectfully,

SETH LOW.

Hon. James W. Wadsworth,

Chairman of the Committee on Agriculture, House of Representatives, Washington, D. C.

> Massachusetts Institute of Technology, Boston, February 26, 1896.

MY DEAR SENATOR PROCTOR: My attention has been called to a letter addressed by the Honorable Secretary of Agriculture, under date of the 11th instant, to the committees on agriculture in the two houses of Con-

gress.

I do not know that my opinion on such a matter will be of any interest to the committee over which you preside, but I feel moved to say that it seems to me that the large and varied work, scientific in its character and in its bearings, now required of the Department of Agriculture, make it highly expedient that there should be a general director of all such branches and services of the Department, both in order that the work may be done to the best advantage and that it may be done with the greatest economy. The Secretary and the Assistant Secretary of Agriculture, being by the necessity of the case political, both in their leading interests and in their tenure of office, it seems to me clear that a permanent, systematic, and expert supervision and direction should be secured for this great variety of scientific investigation and research.

Very truly yours, (Signed)

CORNELL UNIVERSITY, Ithaca, N. Y., February 24, 1896.

DEAR SIR: Secretary Morton's recommendation to Congress of the appointment of a Director-in-Chief over the Scientific Work of the Department of Agriculture has been brought to our attention here, and the men connected with the work in the agricultural experiment station at Cornell University are unanimous in urging the wisdom of complying with Secretary Morton's suggestion. It is believed that the scientific work in agriculture could not only be greatly furthered by having an able scientist in direct and permanent charge of the whole matter, but that it would result in an actual saving to the Department, owing to the fact that the various semi-independent subheads in the Department are not properly organizing the work, and are wastefully duplicating one another's investigations, etc.

I take the liberty, therefore, as one directly interested in the work, of writing to urge that you should further the carrying out of the Secretary's recommendation, when it comes up before the Senate for consideration.

Yours very truly, (Signed)

J. G. SCHURMAN.

Senator REDFIELD PROCTOR, Washington, D. C.

BOSTON UNIVERSITY, PRESIDENT'S OFFICE,

Boston, February 19, 1896.

DEAR SIR: My attention having been called to the proposal to have appointed a Director-in-Chief of Scientific Bureaus and Investigations under the authority of the Secretary of Agriculture, I beg to add my

recommendation to those sure to reach you at an early date.

To confine myself to the one point on which, as an educator, I have a better right to speak, I would say that I have often been impressed by the lack of harmonious cooperation observable in the laboratory work of the agricultural colleges and in the experiment stations connected with them. Of course every agricultural faculty should be encouraged to invent and follow out new lines of investigation, but even the professors who most prize individual and collegiate initiative would be glad to cooperate with colleagues in other institutions and even in other nations, if by so doing they could hope to settle some of the problems that have a scope too broad for any one locality or any one country. A scientific director-in-chief would be just the man needed to receive and to give suggestions relating to such cooperations.

I think he would be worth to the country far more than the amount of his salary had he no other function than this at which I have hinted. I might urge many other important considerations but will leave

them to others.

With best hopes for the success of the measure, I remain, Yours respectfully,

WM. T. WARREN.

Hon. Redfield Proctor, Washington, D. C. THE UNIVERSITY OF NEBRASKA, Lincoln, February 24, 1896.

DEAR SIR: Permit me respectfully but very earnestly to beg you, if possible, to support the recommendation of the Hon. J. Sterling Morton

of a Director-in-Chief of Scientific Bureaus and Investigations.

As the director here of an experiment station in the closest contact with the people of an agricultural State, I have come to appreciate the greatness of the scientific work entrusted to the United States Department of Agriculture. I am confident that the people of Nebraska would sustain almost unanimously the proposition for a director-in-chief of scientific bureaus and investigations.

Believe me, my dear sir, very respectfully yours,

(Signed) GEORGE E. MACLEAN,

Director of the Station and Chancellor of the University.

Senator REDFIELD PROCTOR,

Washington, D. C.

Wesleyan University, Middletown, Conn., February 20, 1896.

SIR: I have the honor to transmit herewith a copy of resolutions passed by the Middletown Scientific Association at its last regular meeting and to request, in behalf of the Association, your favorable attention to the subject.

Respectfully, (Signed) Chas. D. Woods,

Corresponding Secretary Middletown Scientific Association.

Hon. REDFIELD PROCTOR,

U. S. Senate, Washington, D. C.

MIDDLETOWN, CONN., February 20, 1896.

At the regular meeting of the Middletown Scientific Association on February 19 the following resolution was adopted:

Resolved, That this Association has been most gratified to learn of the proposition of the Secretary of Agriculture to Congress for the appointment of a director-in-chief of the scientific and technical work of the Department of Agriculture and that the Association earnestly hopes that the measure may receive favorable consideration by Congress.

(Signed)

W. P. Bradley, Secretary.

Punta Gorda, Fla., February 24, 1896.

MY DEAR MR. GOODE. Your favor of the 15th has reached me here. \* \* \* I think a director of the scientific work of the Department of Agriculture would be of great public advantage. But I do not think he should hold office "during good behavior." An inadequate man could hardly be gotten rid of in such a case. The officer should be appointed by the President by and with the advice and consent of the Senate, to hold office either during the pleasure of the President, or else for say six years, and in that case removable for inability or misconduct, on written accusation and hearing. You can make such use of this note as you think proper.

Very truly yours,

GEO. F. EDMUNDS.

Prof. G. Browne Goode,

Washington, D. C.

New York City, February 13, 1896.

My Dear Senator Proctor: I am very anxious to do anything I can to help the passage of that amendment to the bill making appropriation for the Department of Agriculture, proposed by the Secretary of Agriculture, which provides for a Director-in-Chief of the Scientific

Bureaus, to serve during good behavior.

I have long been much interested in the scientific work of our Government. It has been done in a manner that reflects credit upon the whole nation; but it should be given more continuity than it has had in the past, and it should be taken absolutely out of the domain of politics. In those scientific bureaus politics should not enter. It would be an excellent thing for the Government if in these scientific bureaus we could have continuity of work from administration to administration; and it seems to me that it could be given by the appointment of a scientific under-secretary. The value of the work would be very greatly enhanced and we would gradually develop at Washington a corps of scientists whose equal would be found in no capital of the civilized world. We could not get a first-class scientific man to take the place if he thought it would be changed with each administration.

I earnestly hope you may see your way clear to support the measure, as it is one in which a large number of scientific men, and of educated men interested in scientific matters, all over the country, take a great

interest. It seems to me a matter of prime importance.

Sincerely yours,

THEODORE ROOSEVELT.

Hon. REDFIELD PROCTOR,

Senate Chamber, Washington, D. C.

University of Wisconsin,

AGRICULTURAL EXPERIMENT STATION, Madison, Wis., February 18, 1896.

Dear Sir: I have just learned that Secretary Morton has sent a communication to the Agricultural Committee recommending the creation of the office of "Director-in-Chief of Scientific Bureaus and Investiga-

tions" in the Department of Agriculture.

I take this early opportunity of writing you that I believe this a most important and timely recommendation, and one which will meet with your entire approbation when you have studied the matter carefully. The Secretary of Agriculture and the Assistant Secretary can not, from the very nature of their offices, give that close attention and continued effort in keeping the scientific bureaus up to their highest efficiency and securing from them the greatest amount of good work possible for the money expended. With an outlay of something like \$1,700,000 for scientific work and investigation, Secretary Morton's recommendation for a head supervisor and director for this vast expenditure seems in line with what any good business man would do under the same circumstances.

Trusting and believing that this matter will receive thoughtful attention at your hands, I am,

Very respectfully, (Signed) W. A. Henry, Director.

Hon. WM. F. VILAS,

U. S. Senate, Washington, D. C.

NEW JERSEY AGRICULTURAL EXPERIMENT STATION. New Brunswick, N. J., February 21, 1896.

DEAR SIR: The agricultural institutions here heartily indorse the recommendation of Secretary Morton in his communication of February 11 to the Committee on Agriculture of the United States Senate. In our judgment an officer designated as Director-in-Chief of Scientific Bureaus and Investigations would greatly increase the efficiency of the

work of the Department.

The very able presentation of the matter by the Secretary of Agriculture renders it unnecessary to add further argument. I simply desire to inform your committee that a favorable consideration of this matter would meet the approval of the agricultural experiment stations, of the college, of the State Board of Agriculture and Horticulture, and of the farmers' organizations in the State.

Respectfully yours, (Signed)

E. B. VOORHEES.

Senator Redfield Proctor, Washington, D. C.

> UNIVERSITY OF VIRGINIA, February 22, 1896.

The proposal to strengthen the U. S. Department of Agriculture by the addition to its staff of a Director of Scientific Work seems to me a wise one—likely to much increase the value of the investigations under-

taken in the interest of agricultural progress.

Clear definitions of the questions to be studied, personal responsibility for the scientific discretion exercised in this selection, unity of plan in regard to the methods to be employed, and permanence in office of the directing head, who can also best coordinate and reduce to form for publication the results reached, are the conditions on which will largely depend the real value of these results, and the proposal in question, if acted on, will go far toward securing such conditions.

(Signed) J. W. MALLET.

Professor of Chemistry.

OHIO STATE UNIVERSITY, EXECUTIVE OFFICE, Columbus, February 22, 1896.

DEAR SENATOR PROCTOR: I learn that the Secretary of Agriculture has asked Congress to appoint a director-in-chief over the constantly increasing scientific work of his Department. \* \* \* I know the work referred to and have had an opportunity from my executive position, as well as from other standpoints, to follow it and test it, and to learn of its extent and usefulness. I am sure the request of the Secretary is an entirely reasonable one, and the suggestion which he makes with regard to the appointment of a director-in-chief is worthy of very careful consideration. I understand that this matter has been referred to your committee, and I beg leave to present to you, and through you to your committee, my most sincere approval of this plan, and to express my hopes that your committeee will make a favorable report thereon.

Cordially yours,

JAMES H. CANFIELD, President.

Senator Redfield Proctor.

Massachusetts Agricultural College, Amherst, Mass., February 19, 1896.

DEAR SIR: The Secretary of Agriculture has asked Congress to appoint a Director-in-Chief over the constantly increasing scientific work of the Department. One million seven hundred thousand dollars out of the entire appropriation are annually used in this scientific and technical work, and 1,000 employes are engaged in carrying it on. It would seem the part of wisdom to place over it a permanent, broadly educated, and experienced scientific superintendent.

The step proposed is distinctly in the right direction. It removes the whole scientific force from out of the sphere of politics. It gives permanency and unity to the work, coordinating the various parts into one harmonious whole. It promotes economic management and will

lead to the best results.

\* \* \* \* \* \* \* \* \* \* \* \* \* \* \* (Signed)

Henry H. Goodell,

President Massachusetts Agricultural College, etc.

STATE COLLEGE OF KENTUCKY, Lexington, Ky., February 24, 1896.

DEAR SIR: I believe that the suggestion of the Secretary is a wise one. The management of the Department so far as the scientific work is concerned should be eliminated from politics. If the amendment is adopted it at once removes the management of such work from the sphere of politics, gives permanency of direction and unity to the work and effectiveness of service. The Secretary and Assistant Secretary are in the nature of the case administrative officers, and as such they must necessarily represent the administration as to politics—the Assistant Secretary, at least, to such a degree as to represent the administration in the absence of the Secretary. Both therefore will most generally go and come with the change of administration. Scientific investigations must be planned ahead and work must be continuous. The outgoing Secretary hesitates to make plans reaching beyond his own administration. It would take the incoming Secretary and Assistant Secretary some time before they knew what was best to do in the line of scientific work, consequently at the beginning of every administration work comes to a standstill and perhaps important investigations cease altogether. With a director-inchief who holds his position during good behavior, and therefore would not be subject to political changes, the investigations would be continued and uninterrupted by administrative changes. The salary of the director-in-chief should be adequate to bring the very best scientific man in the country to the Department.

I venture to hope that your committee will incorporate the suggestions

contained in the amendment in the Senate bill.

Very truly yours, (Signed)

M. A. Scovell,
Director Kentucky Agr'l Experiment Station.

JAS. K. PATTERSON,
President A. and M. College.

Hon. Redfield Proctor, Senate Chamber, Washington, D. C. Massachusetts State Board of Agriculture, Boston, Mass., February 20, 1896.

DEAR SIR: I take the liberty of writing you to urge that the Committee on Agriculture give favorable consideration to the proposition now before them to provide a Director-in-Chief of Scientific Bureaus and Investigations, to serve during good behavior, to have authority to act as Assistant Secretary of Agriculture, and to perform such other duties as the Secretary may direct. My reasons for urging this step are that it takes the whole scientific corps of the Department of Agriculture out of politics. It gives permanence and unity to the work, coordinating the several parts into one harmonious whole. It promotes economic management and promises the best results.

Respectfully, (Signed)

WM. R. Sessions, Secretary.

Hon. Redfield Proctor, Senate Chamber, Washington, D. C.

> Massachusetts Horticultural Society, Boston, February 20, 1896.

My Dear Sir: My attention having been called to the recommendation of the Hon. Secretary of Agriculture that the committees on agriculture insert a clause after line 11, page 1, H. R. 5161, to give a Director-in-Chief of Scientific Bureaus, etc., salary \$6,000, I have the honor to express an approval of the plan to have such director.

I am, yours very respectfully,

Francis H. Appleton, A. M.,
President Massachusetts Horticultural Society, etc.

Hon. Redfield Proctor.

Maine State Jersey Cattle Association, Secretary's Office, Winthrop, Me., February 20, 1896.

DEAR SIR: I beg leave to state that I heartily approve of Secretary Morton's recommendation relating to the appointment of a Director-in-Chief of Scientific Bureaus of Investigation. In making this statement I think I voice the popular sentiment of all intelligent agriculturists of all sections of our country.

I think in giving this matter your careful consideration, the advantages to be derived from the contemplated measure will readily suggest themselves to your mind, hence I will refrain from making any argument in favor of the measure.

Very truly yours,

N. R. PIKE.

Hon. Redfield Proctor, U. S. Senate. PHENIX, ARIZ., February 28, 1896.

DEAR SIR: In my temporary absence from Pennsylvania, I have been informed of a proposition pending before Congress to establish the office of Director-in-Chief of Scientific Work in the Department of Agriculture, and the measure seems to me of so great importance that I respectfully ask leave to lay before you some of the considerations that influence my own judgment, in the hope that they or others like them may appeal to

yours also.

The scientific work of that Department has come to be recognized at home and abroad as of the best quality, covering a very wide range of research and experiment, the object of which is to aid in developing, utilizing, and conserving the vast agricultural resources of the country. It has been a growth by separate divisions rather than a single administrative creation, and has for that reason lacked something of the unity, the efficiency, and the economy which might have been secured by a better defined coordination of all its branches under one directing head. Until quite recently it is probable that no serious difficulty has been felt on this point, but as soon as the Department became a Cabinet position, many of the friends of agricultural science felt that the time had come to make a first step toward remedying the defect. Accordingly, a committee of the Association of American Agricultural Colleges and Experiment Stations presented the matter to President-elect Harrison, shortly before his inauguration, urging upon him the importance of adopting such a policy in the organization and administration of the new Department as would give continuity and unity to its scientific work and remove it from political influence. General Harrison expressed his cordial concurrence in the views presented by the committee, and immediately on the appointment of Secretary Rusk requested (it might even be said, instructed) him to name an Assistant Secretary who would carry them into effect. This was done, and the Secretary, by formal order, relegated the immediate supervision of all such branches of the Department to Assistant Secretary Willits, whose fine intelligence and high sense of public duty were most earnestly devoted to carrying out the policy indicated. 1893 President-elect Cleveland expressed to a similar committee his hearty approval of this policy, and Secretary Morton, after some delay, was fortunate in securing the services of the present accomplished Assistant Secretary, Dr. Dabney.

It will thus be seen that the inherent defects of the situation have been clearly seen, but have been neutralized, as far as practicable, by the good judgment of two successive heads of the Department. I have taken the liberty of detailing these facts, which are within my personal knowledge, for the sake of showing that the measure now proposed would merely give the sanction of law to a practice which has been deliberately approved and fol-

lowed under two successive administrations of opposite political faith.

At first thought, the suggestion may present itself that other Secretaries may be trusted to adopt a similar course, and that therefore no legislation is required. But there are two or three weighty and, it seems to me, conclusive considerations against the acceptance of that view. In the first place, if the practice actually followed is a good one, it would seem to be the part of wisdom to make it a secure and permanent factor in the established system rather trust it to uncertain chances. The direction of this scientific work should be both continuous and progressive. Everyone recognizes the fact that, in order to secure the best results,

those who have charge of its separate branches must possess a high degree of special training, supplemented by careful and prolonged experience, and, as a matter of fact, most of the chiefs of scientific bureaus and divisions are retained without regard to changes of administration. But it must be obvious that the same necessity exists in still greater degree with reference to the control and direction of the whole body of such work.

If Assistant Secretary Willits, for example, was the man for the place, he should have been continued in it, and undoubtedly would have been except that his appointment was necessarily a political one. The same remark applies to the present Assistant Secretary, and the only practicable way of securing the desired end is to provide a head for all this work whose tenure shall be at least as secure as that of his subordinates,

by making it also nonpolitical.

A further consideration is that the work of the Department has become so extensive as to require the services of two officers instead of the single one now provided for. The prompt direction of the scientific work will fully absorb the time and the powers of the ablest man who can be secured for the position. Besides having a broad and varied scientific knowledge, he must possess organizing and administrative ability of a high order since these branches of the Department involve at present the employment of nearly one thousand men and the annual expenditure of nearly one and three-quarters millions of dollars.

The duties of this position are wholly incompatible with those of a political nature and with those more general administrative duties to which an Assistant Secretary must necessarily devote much of his time

and attention.

Trusting that the importance of this subject may be a sufficient apology for this long communication, I am, with great respect,

Faithfully yours,

(Signed)

GEO. W. ATHERTON,

(President of the Pennsylvania State College.)

Hon. Redfield Proctor,

U. S. Senate, Washington, D. C.

University of California, College of Agriculture, Berkeley, Cal., February 29, 1896.

DEAR SIR: I note with great interest your communication to the Committee of Agriculture regarding the need of a scientific head for the scientific work of the Department, who shall not be subject to the political changes likely to occur every fourth year. Even if the present Congress should not act favorably upon this proposition, it is certain to be enacted before many years. It will surely command the unanimous support of the agricultural colleges and experiment stations as the only logical and rational mode of organizing that work to the best advantage. In this connection I take the liberty of transmitting to you a reprint of an article I published in 1882 in the Atlantic Monthly, and which discusses this very point in connection with the issue then pending, of

giving the Commissioner a Cabinet position, which I then opposed on this very ground. I am glad now to see my foresight justified by your proposition.

Respectfully yours, (Signed)

E. W. HILGARD.

Hon. J. STERLING MORTON,

Secretary of Agriculture, Washington, D. C.

The Agricultural College of Utah, Logan, Utah, February 27, 1896.

SIR: A copy of the amendment proposed by Secretary Morton to the bill making appropriation for the Department of Agriculture has been received at this office.

At this college and experiment station we strongly favor the amendment advocated by the Secretary of Agriculture.

Truly yours,

(Signed)

J. H. Paul, President and Director.

Senator Redfield Proctor, Washington, D. C.

[National Geographic Magazine for March, 1896.]

The proposal to establish a permanent Director-in-Chief of Scientific Bureaus and Investigations in the Department of Agriculture, to give coordination and continuity to the many-sided scientific work of the Department and to complete the good work done by the present Secretary in protecting the scientific force from the onslaught of the political spoilsman, has created great interest in the scientific world and called forth a very notable expression of favorable opinion from a large number of eminent scientists and scientific educators. \* \* \* While the recommendation is scarcely likely to be favorably acted upon at the present session of Congress, it is too obviously a step in the direction of a more effective and at the same time more economical administration—too manifestly in the interest of good government in general—for its adoption to be long delayed.

#### THE GOVERNMENT'S SCIENTIFIC WORK.

[Hartford Courant.]

The Secretary of Agriculture has made a very important recommendation to Congress regarding the scientific work which the Government is doing through the Department of Agriculture. It is that this work be removed entirely from politics and put on that kind of a business basis which is essential for the success of enterprises and especially so for scientific investigations. This is a move in the right direction and deserves the support of every friend of right administration of the Government, irrespective of party.

The recommendation is to insert in the appropriation bill for the

Department of Agriculture the following clause:

Director-in-Chief of Scientific Bureaus and Investigations, to serve during good behavior, to have the authority to act as Assistant Secretary, and to perform such other duties as the Secretary may direct, \$6,000.

This means that the scientific and technical work of the Department, for which the Government pays \$1,700,000 per year, which employs nearly 1,000 experts and other officers, and which has its headquarters in Washington, but is distributed through every State and Territory in the Union, which includes the Weather Bureau, the Bureau of Animal Industry, the Office of Experiment Stations, the divisions of Chemistry and Botany, and other branches of the Government, shall have, what it thus far never has had, a permanent administrative head; that this director-in-chief shall be, not a Secretary who is a member of the Cabinet and a political officer changing with every administration, nor an Assistant Secretary, who is likewise subject to change of President or Secretary, but a thoroughly competent man, chosen, not for his politics, but for his especial fitness to have charge of extensive scientific investigations and who shall be free from fluctuations of politics and

hold office during good behavior.

From the man who regards public office as a private snap the hearty approval of such a measure as this is hardly to be expected. It is difficult to see how anyone else could oppose it or how any man who has the best interests of the Government in general and of its special scientific labors for the people in particular could fail to welcome it so long as this work is carried on by the Government. The most probable objection is the expense. The salary proposed is \$6,000 a year. But this is as small a sum as a thoroughly competent man ought to be expected to do this work for. It is less than such a man would ordinarily receive for equivalent services in ordinary private business. Such an administration would make a material saving in the expenditures of the money and an equal if not more important increase in the efficiency and usefulness of the work done. To estimate the advantage of such an administration in terms of money is, of course, impossible, but even putting it as low as 5 per cent of the amount expended, and to anyone familiar with such things this would seem almost absurdly low; it would amount to \$85,000 a year, and the expenditure called for to bring about this saving would be only \$6,000.

The measure is strongly urged by intelligent and disinterested men throughout the country. It is believed that this will be a long step toward the better unification and management of the scientific and technical work of the Government in general. It is in the line of true

civil service reform.

## Opinions of scientific men with regard to the proposition for a Director-in-Chief of Scientific Bureaus in the Department of Agriculture.

[From the Joint Commission of the Scientific Societies of Washington, D. C.]

Whereas, The work of the Department of Agriculture in the discovery, exploration, development, conservation, and proper utilization of the resources of our country is of the utmost importance; and whereas the Department's capacity for originating, procuring, and disseminating knowledge of vital importance to farming and other interests, though already large, is capable of much extension in the future; and whereas the results accomplished through the system now in existence have been exceedingly great, and the one thing above all others necessary to increase the efficiency of this organization is a permanent policy with regard to its work and personnel:

Resolved, That the Joint Commission of the Scientific Societies of Washington, composed of the officers of the several scientific societies of the city, comprising in all a membership of nearly 2,000, heartily approves the proposition to create the office of "Director-in-Chief of Scientific Divisions in the Department of Agriculture," to be filled by a broadly educated and experienced scientific administrative officer,

holding office during good behavior.

Resolved, That the plan of having a permanent officer in charge of the scientific and technical work under the executive head of a Department represents a distinct advance in good government, and is therefore not only of national importance, but if carried out certain to have a beneficial effect upon the scientific standing of Government work in all its relations.

[From members of the faculty of the Johns Hopkins University.]

The undersigned, having been informed that it is proposed to create in the Department of Agriculture the office of Director of Scientific Work, hereby express their conviction that the measure proposed is wise and timely. It has been demonstrated beyond question, during the present generation, that the applications of science to agriculture are innumerable and important. The work of the Department has met with the approval of highly qualified judges throughout this country and in other lands. In our opinion the time has come to give unity and permanence to this work by establishing an office to be held by a person of high qualifications, who shall not be liable to removal because of a change in the general administration of the Government.

(Signed) Daniel C. Gilman, President.

Daniel C. Gilman, President.

Ira Remsen, Professor of Chemistry.

Wm. B. Clark, Professor of Organic Geology,
Henry N. Rowland, Professor of Physics.

Wm. H. Howell, Professor of Physiology.

Jas E. Humphrey, Lecturer on Botany.

Edward H. Griffin, Dean of the College Faculty.

Edward Renouf, Collegiate Professor of Chemistry.

H. N. Morse, Professor of Analytical Chemistry.

February 18, 1896.

[From the faculty of Yale University.]

New Haven, Conn., February 25, 1896.

We, the undersigned, officers in Yale University, having been informed that the Honorable Secretary of Agriculture wishes to create in his Department a Director of Scientific Work, to hold the office during good behavior, wish to express our belief that the measure is a wise one.

The practical applications of science in the prosecution of our industries are too numerous and are on too vast a scale in our country to need any argument regarding their importance. The work of the Department of Agriculture in this direction has met with the approval of those best qualified to judge, both as to its scientific value and its practical use.

In our opinion, efficiency in the work and economy in expenditures will be increased by placing the scientific work under the supervision of a person of high qualifications, whose tenure of office shall be as permanent as that of professors in universities, or experts in industrial establishments.

We believe that this is a fit time and the Department a practical place for the establishment of such an office, and earnestly and respectfully petition that the measure will be carried out.

TIMOTHY DWIGHT,

President.

WM. H. BREWER,

Professor of Agriculture.

A. J. Dubois,

Professor of Civil Engineering. SIDNEY I. SMITH.

Professor of Comparative Anatomy. R. H. CHITTENDEN,

Professor of Physiological Chemistry. JOHN E. CLARK,

Professor of Mathematics.

WM. G. MIXTER,

Professor of Chemistry.

L. L. PENFIELD,

Professor of Mineralogy.

A. E. VERRILL,

Professor of Zoology. HENRY W. FARNUM,

Professor of Political Economy.

S. W. Johnson,

Professor of Agricultural Chemistry. HORACE L. WELLS,

Professor of Chemistry.

CHARLES S. HASTINGS,

Professor of Physics.

SHEFFIELD SCIENTIFIC SCHOOL OF YALE UNIVERSITY, New Haven, Conn., February 20, 1896.

DEAR SIR: I learn that the Secretary of Agriculture has asked for an appropriation of \$6,000 for the salary of a "Director-in-Chief of Scientific Bureaus and Investigations," who is to serve during good behavior and to have authority to act as Assistant Secretary.

I earnestly hope that the appropriation may be made. I consider the suggestion one of extreme importance, and if the matter can be brought about it will be more far-reaching in its results than its mere use in the Agricultural Department. I have long been reasonably familiar with the operations of the scientific bureaus in the several Departments at Washington, and have had exceptional opportunities to know the opinions held by prominent scientific men of the country regarding the conditions necessary or desirable for the most efficient scientific work done in these bureaus.

Some years ago, as a member of the Committee of the National Academy of Sciences, asked to consider plans looking to the better correlation of the work of the scientific bureaus of the several Departments of Government, I studied the general subject at length.

then I have been familiar with the work of the Department of Agriculture and of the important effect it is having on the industries of the country.

I feel that the present movement is entirely in the right direction. Much more than that, it seems to me to be more practical than any of

the plans that have heretofore been suggested.

It requires no argument that, for the good of the work to be accomplished, there should be permanency in the office of the one who supervises the work, and only by a permanence similar to that existing in the offices of scientific men in universities, or even great technical establishments, can a man of the highest standing be available. I am confident that only by some such permanence of office can the efficiency and character of the work of the Department be depended upon from administration to administration.

That this is in the direction of good government needs no argument;

nor that it would be more economical in the end.

Moreover, there is no question in my mind but that such a movement would exert a most excellent influence on the other Departments, and enhance the scientific value of the Government work in the estimation of both scientific men and of the citizens who practically apply the results in their vocations.

Yours respectfully,

WM. H. BREWER,

Professor of Agriculture in Yale University.

Hon. REDFIELD PROCTOR,

Chairman of the Committee on Agriculture.

#### HARVARD UNIVERSITY,

LAWRENCE SCIENTIFIC SCHOOL, Cambridge, Mass., February 18, 1896.

My Dear Sir: I beg leave to enter with you my petition that the proposed amendment to the Agricultural Appropriation Bill, providing for the appointment of a Director-in-Chief of Scientific Bureaus and Investigations may find favor with your committee.

The change which will be made by the adoption of the measure will secure unity in the varied work of the Department and will increase the effectiveness of the excellent service which the Department is ren-

dering to the economic and scientific interests of this country.

Yours very truly,

(Signed)

N. S. SHALER.

Senator Redfield Proctor, Chairman Committee on Agriculture.

> Columbia College, New York, February 13, 1896.

My Dear Sir: I have just learned that the Secretary of the Department of Agriculture has asked for the insertion, in the appropriation bill for the Department, of the following words: "Director-in-Chief of Scientific Bureaus and Investigations, to serve during good behavior, to have authority to act as Assistant Secretary, and to perform such other duties as the Secretary may direct—\$6,000."

It gives me pleasure to say that I look upon this suggestion as opening the way for a most important reform in relation to the scientific work of the Department, and, incidentally, of the scientific work of the Government as a whole. From the nature of the case, scientific work

is as far as possible removed from the sphere of politics. Permanency in the direction of it is essential to the accomplishment of the best results—

(1) Because only by permanency can the oversight and direction of a man of the highest standing be secured; and,

(2) Because very many scientific investigations have to be maintained

for a series of years before they yield trustworthy results.

Speaking as an administrator, I should take it for granted that such an officer appointed on a permanent tenure during good behavior, would save to the Government many times his salary every year in administrative expenses, while he would multiply very greatly the efficiency of all bureaus placed under his care. I think it quite probable that the Government would be asked to appropriate as much money after such an appointment as now, but I am confident the money would go a great deal further and produce much more valuable results. Under these circumstances, I venture to hope that your committee and the House will adopt the suggestion of the Secretary in regard to this very important matter. I do not think it easy to overestimate the effect it would have upon the scientific standing of the Government work in all its relations both at home and abroad.

Respectfully,

SETH LOW.

Hon. James W. Wadsworth,

Chairman of the Committee on Agriculture, House of Representatives, Washington, D. C.

> MASSACHUSETTS STATE BOARD OF AGRICULTURE, Boston, Mass., February 20, 1896.

Dear Sir: I take the liberty of writing you to urge that the Committee on Agriculture give favorable consideration to the proposition now before them to provide a Director-in-Chief of Scientific Bureaus and Investigations, to serve during good behavior, to have authority to act as Assistant Secretary of Agriculture, and to perform such other duties as the Secretary may direct. My reasons for urging this step are that it takes the whole scientific corps of the Department of Agriculture out of politics. It gives permanence and unity to the work, coordinating the several parts into one harmonious whole. It promotes economic management and promises the best results.

Respectfully, (Signed)

WM. R. Sessions, Secretary.

Hon. Redfield Proctor, Senate Chamber, Washington, D. C.

> Massachusetts Horticultural Society, Boston, February 20, 1896.

My Dear Sir: My attention having been called to the recommendation of the Hon. Secretary of Agriculture that the committees on agriculture insert a clause after line 11, page 1, H. R. 5161, to give a Director-in-Chief of Scientific Bureaus, etc., salary \$6,000, I have the honor to express an approval of the plan to have such director.

I am, yours very respectfully,

Francis H. Appleton, A. M., President Massachusetts Horticultural Society, etc.

Hon. REDFIELD PROCTOR.

MAINE STATE JERSEY CATTLE ASSOCIATION, SECRETARY'S OFFICE, Winthrop, Me., February 20, 1896.

DEAR SIR: I beg leave to state that I heartily approve of Secretary Morton's recommendation relating to the appointment of a Director-in-Chief of Scientific Bureaus of Investigation. In making this statement I think I voice the popular sentiment of all intelligent agriculturists of all sections of our country.

I think in giving this matter your careful consideration, the advantages to be derived from the contemplated measure will readily suggest themselves to your mind, hence I will refrain from making any argu-

ment in favor of the measure.

N. R. PIKE.

Very truly yours, Hon. REDFIELD PROCTOR,

U. S. Senate.

Wesleyan University, Middletown, Conn., February 20, 1896.

SIR: I have the honor to transmit herewith a copy of resolutions passed by the Middletown Scientific Association at its last regular meeting and to request, in behalf of the Association, your favorable attention to the subject.

Respectfully, (Signed) Chas. D. Woods, Corresponding Secretary Middletown Scientific Association.

Hon. REDFIELD PROCTOR,

Chairman Committee on Agriculture, U. S. Senate, Washington, D. C.

Middletown, Conn., February 20, 1896.

At the regular meeting of the Middletown Scientific Association on February 19 the following resolution was adopted:

Resolved, That this Association has been most gratified to learn of the proposition of the Secretary of Agriculture to Congress for the appointment of a director-in-chief of the scientific and technical work of the Department of Agriculture and that the Association earnestly hopes that the measure may receive favorable consideration by Congress.

(Signed)

W P. Bradley, Secretary

Punta Gorda Fla., February 24, 1896.

MY DEAR MR. GOODE.

Your favor of the 15th has reached me here. \* \* \* I think a director of the scientific work of the Department of Agriculture would be of great public advantage. But I do not think he should hold office "during good behavior." An inadequate man could hardly be gotten rid of in such a case. The officer should be appointed by the President by and with the advice and consent of the Senate, to hold office either during the pleasure of the President, or else for say six years, and in that case removable for inability or misconduct, on written accusation and hearing. You can make such use of this note as you think proper.

Very truly yours,

GEO. F. EDMUNDS.

Prof. G. Browne Goode, Washington, D. C.

NEW YORK CITY, February 13, 1896.

My Dear Senator Proctor: I am very anxious to do anything I can to help the passage of that amendment to the bill making appropriation for the Department of Agriculture, proposed by the Secretary of Agriculture, which provides for a Director-in-Chief of the Scientific

Bureaus, to serve during good behavior.

I have long been much interested in the scientific work of our Government. It has been done in a manner that reflects credit upon the whole nation; but it should be given more continuity than it has had in the past, and it should be taken absolutely out of the domain of politics. In those scientific bureaus politics should not enter. It would be an excellent thing for the Government if in these scientific bureaus we could have continuity of work from administration to administration; and it seems to me that it could be given by the appointment of a scientific under-secretary. The value of the work would be very greatly enhanced and we would gradually develop at Washington a corps of scientists whose equal would be found in no capital of the civilized world. We could not get a first-class scientific man to take the place if he thought it would be changed with each administration.

I earnestly hope you may see your way clear to support the measure, as it is one in which a large number of scientific men, and of educated men interested in scientific matters, all over the country, take a great

interest. It seems to me a matter of prime importance.

Sincerely yours,

THEODORE ROOSEVELT.

Hon. REDFIELD PROCTOR, Senate Chamber, Washington, D. C.

> University of Wisconsin, AGRICULTURAL EXPERIMENT STATION, Madison, Wis., February 18, 1896.

Dear Sir: I have just learned that Secretary Morton has sent a communication to the Agricultural Committee recommending the creation of the office of "Director-in-Chief of Scientific Bureaus and Investiga-

tions" in the Department of Agriculture.

I take this early opportunity of writing you that I believe this a most important and timely recommendation, and one which will meet with your entire approbation when you have studied the matter care-The Secretary of Agriculture and the Assistant Secretary can not, from the very nature of their offices, give that close attention and continued effort in keeping the scientific bureaus up to their highest efficiency and securing from them the greatest amount of good work possible for the money expended. With an outlay of something like \$1,700,000 for scientific work and investigation, Secretary Morton's recommendation for a head supervisor and director for this vast expenditure seems in line with what any good business man would do under the same circumstances.

Trusting and believing that this matter will receive thoughtful attention at your hands, I am,

(Signed) Very respectfully, W. A. HENRY, Director.

Hon. WM. F. VILAS, U. S. Senate, Washington, D. C. New Jersey Agricultural Experiment Station, New Brunswick, N. J., February 21, 1896.

DEAR SIR: The agricultural institutions here heartily indorse the recommendation of Secretary Morton in his communication of February 11 to the Committee on Agriculture of the United States Senate. In our judgment an officer designated as Director-in-Chief of Scientific Bureaus and Investigations would greatly increase the efficiency of the

work of the Department.

The very able presentation of the matter by the Secretary of Agriculture renders it unnecessary to add further argument. I simply desire to inform your committee that a favorable consideration of this matter would meet the approval of the agricultural experiment stations, of the college, of the State Board of Agriculture and Horticulture, and of the farmers' organizations in the State.

Respectfully yours, (Signed)

E. B. VOORHEES.

Senator Redfield Proctor, Washington, D. C.

> University of Virginia, February 22, 1896.

The proposal to strengthen the U. S. Department of Agriculture by the addition to its staff of a Director of Scientific Work seems to me a wise one—likely to much increase the value of the investigations under-

taken in the interest of agricultural progress.

Clear definitions of the questions to be studied, personal responsibility for the scientific discretion exercised in this selection, unity of plan in regard to the methods to be employed, and permanence in office of the directing head, who can also best coordinate and reduce to form for publication the results reached, are the conditions on which will largely depend the real value of these results, and the proposal in question, if acted on, will go far toward securing such conditions.

(Signed) J. W. MALLET.

Professor of Chemistry.

Ohio State University, Executive Office, Columbus, February 22, 1896.

Dear Senator Proctor: I learn that the Secretary of Agriculture has asked Congress to appoint a director-in-chief over the constantly increasing scientific work of his Department. \* \* \* I know the work referred to and have had an opportunity from my executive position, as well as from other standpoints, to follow it and test it, and to learn of its extent and usefulness. I am sure the request of the Secretary is an entirely reasonable one, and the suggestion which he makes with regard to the appointment of a director-in-chief is worthy of very careful consideration. I understand that this matter has been referred to your committee, and I beg leave to present to you, and through you to your committee, my most sincere approval of this plan, and to express my hopes that your committeee will make a favorable report thereon.

Cordially yours,

James H. Canfield, President.

Senator Redfield Proctor.

Massachuserts Agricultural College, Amherst, Mass., February 19, 1896.

DEAR SIR: The Secretary of Agriculture has asked Congress to appoint a Director-in-Chief over the constantly increasing scientific work of the Department. One million seven hundred thousand dollars out of the entire appropriation are annually used in this scientific and technical work, and 1,000 employes are engaged in carrying it on. It would seem the part of wisdom to place over it a permanent, broadly educated, and experienced scientific superintendent.

The step proposed is distinctly in the right direction. It removes the whole scientific force from out of the sphere of politics. It gives permanency and unity to the work, coordinating the various parts into one harmonious whole. It promotes economic management and will

lead to the best results.

(Signed)

> STATE COLLEGE OF KENTUCKY, Lexington, Ky., February 24, 1896.

DEAR SIR: I believe that the suggestion of the Secretary is a wise one. The management of the Department so far as the scientific work is concerned should be eliminated from politics. If the amendment is adopted it at once removes the management of such work from the sphere of politics, gives permanency of direction and unity to the work and effectiveness The Secretary and Assistant Secretary are in the nature of the case administrative officers, and as such they must necessarily represent the administration as to politics—the Assistant Secretary, at least, to such a degree as to represent the administration in the absence of the Secretary. Both therefore will most generally go and come with the change of administration. Scientific investigations must be planned ahead and work must be continuous. The outgoing Secretary hesitates to make plans reaching beyond his own administration. It would take the incoming Secretary and Assistant Secretary some time before they knew what was best to do in the line of scientific work, consequently at the beginning of every administration work comes to a standstill and perhaps important investigations cease altogether. With a director-inchief who holds his position during good behavior, and therefore would not be subject to political changes, the investigations would be continued and uninterrupted by administrative changes. The salary of the director-in-chief should be adequate to bring the very best scientific man in the country to the Department.

I venture to hope that your committee will incorporate the suggestions

contained in the amendment in the Senate bill.

Very truly yours, (Signed)

M. A. Scovell,
Director Kentucky Agr'l Experiment Station.
JAS. K. PATTERSON,
President A. and M. College.

Hon. Redfield Proctor, Senate Chamber, Washington, D. C.



